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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/426,579	10/25/1999	RICHARD G. BEDNAR	EN999023	2074

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EXAMINER

CHUNG, DANIEL J

ART UNIT

PAPER NUMBER

2672

DATE MAILED: 09/15/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/426,579

Applicant(s)

BEDNAR ET AL.

Examiner

Daniel J Chung

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 June 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 20 and 22-25 is/are allowed.
- 6) ☒ Claim(s) 1-5, 14-19 and 21 is/are rejected.
- 7) ☒ Claim(s) 6-13 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claims 1-25 are presented for examination. Claims 22-25 have been added by the amendment filed on 6-30-2003. This office action is in response to the amendment filed on 6-30-2003. The objection to the objection has been withdrawn because of amendment.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-5, 14-19 and 21 are rejected under 35 U.S.C. 102(b) as being anticipated by Pendred (U.S 3,600,513).

Regarding claim 1, Pendred discloses that the claimed feature of a method for filling a polygon with a minimum number of rectangles, comprising: bordering polygon [i.e. "border or outline image"; 80], including: selecting a starting border width [i.e. "distance d" in Fig 9]; and merging border segments where possible [i.e. corners of border or outline image 80]; and then orthogonally filling. (See Fig 4-5, Fig 7, Fig 9, col 1 line 35-59, col 1 line 68-col 2 line 19, col 6 line 35-53, col 6 line 72-col 7 line 17)

Regarding claim 2, Pendred discloses that the claimed feature of a method for filling an original polygon envelope with a minimum number of stripes, comprising: creating a border polygon [80]; generating orthogonal fill stripes ["rectangular or bar-shaped images"]; (See Fig 4-5, Fig 7, Fig 9, col 1 line 35-59, col 1 line 68-col 2 line 19, col 6 line 35-53, col 6 line 72-col 7 line 17) and processing uncovered areas. (See col 2 line 11-13, col 7 line 23-28, col 8 line 9-17)

Regarding claim 3, Pendred discloses that receiving input parameters [30,32,300], input parameters including parameters defining a minimum stripe width, a maximum stripe width, and a merge adjacent borders flag. (See col 1 line 43-51, col 1 line 63-65, col 2 line 4-8, col 4 line 28-54)

Regarding claim 4, Pendred discloses that input parameters further including stripe overlap amount. (See Fig 9, col 1 line 38-50, col 2 line 4-8)

Regarding claim 5, Pendred discloses that input parameters further including wire with ends size delta, and maximum number of borders. (See Fig 9, col 1 line 43-51, col 1 line 63-65, col 2 line 4-8, col 4 line 28-54)

Regarding claims 14-19 and 21, claims 14-19 and 21 are similar in scope to the claims 1-3, and thus the rejections to claims 1-3 hereinabove are also applicable to claims 14-19 and 21.

Response to Arguments/Amendments

Applicant's arguments with respect to claims 1-21 have been considered but are moot in view of the new ground(s) of rejection.

Allowable Subject Matter

Claims 20 and 22-25 are allowed.

Claims 6-13 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: The present invention is directed to a method for filling a polygon with a minimum number of rectangles. The above claims identifies the uniquely distinct features "calculating the length of each side of current polygon; deriving a smallest side length parameter equal to the larger of a first factor times minimum stripe width or the length of the shortest side obtained from step for calculating length; setting smallest side length parameter from deriving step to a reduced amount by a second factor; if current polygon is an inner border and smallest side length parameter is less than the previous border width, setting smallest side length equal to previous border width; if

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smallest side length parameter is greater than maximum stripe width parameter, setting smallest side length parameter equal to maximum strip width parameter; and returning smallest side length parameter for processing as maximum current polygon border width parameter". The closest prior art, Frei (US 5,159,201) and Pendred (US 3,600,513) discloses a similar system, either singularly or in combination, fail to anticipate or render the above underlined limitations obvious.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel J. Chung whose telephone number is (703) 306-3419. He can normally be reached Monday-Thursday and alternate Fridays from 7:30am- 5:00pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael, Razavi, can be reached at (703) 305-4713.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:

(703) 872-9314 (for Technology Center 2600 only)


Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

djc
September 3, 2003


JEFFERY BRIER
PRIMARY EXAMINER